

537, 409

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
17 June 2004 (17.06.2004)

PCT

(10) International Publication Number
WO 2004/050664 A1

- (51) International Patent Classification⁷: **C07F 3/00**
- (21) International Application Number: **PCT/KR2003/002674**
- (22) International Filing Date: 5 December 2003 (05.12.2003)
- (25) Filing Language: **Korean**
- (26) Publication Language: **English**
- (30) Priority Data:
10-2002-0076803
5 December 2002 (05.12.2002) **KR**
- (71) Applicant (for all designated States except US): **MD BIOALPHA CO., LTD.** [KR/KR]; #1713, Honor's Ville, 1380-1, Dunsan-dong, Seo-gu, 302-120 Daejeon (KR).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **PARK, Myung-Gyu** [KR/KR]; 7-302, Seogeunaemaoul SK Apt., Seochon-ri, Giheung-eup, Yongin Si, 449-906 Gyeonggi-Do (KR). **CHOI, Mi Hee** [KR/KR]; 198-224, Godeung-dong, Gwonseon-gu, Suwon-Si, 441-802 Gyeonggi-Do (KR).
- (74) Agent: **SOHN, Chang Kyu**; 4F., Halla Bldg., 641-17, Yoksam-dong, Kangnam-gu, Seoul 135-080 (KR).
- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:**
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD FOR PREPARATION OF AMINO ACID CHELATE

(57) Abstract: The present invention provides methods for preparation of metallic amino acid chelates that are electrically neutral and free of interfering ions, by reacting a metal carbonate and an acidic amino acid in an aqueous solution, and the uses of said metallic amino acid chelates. The metallic amino acid chelates can be added to a product such as medical supplies, foods, beverages, cosmetics, feeds, etc., with maintaining the stability of the product at a variety of temperature and pH ranges and also having no effect on the properties of the product, including taste and appearance.

WO 2004/050664 A1